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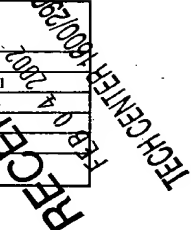
# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 9

Complete if Known

Application Number 09/93,721  
Filing Date August 24, 2001  
First Named Inventor HU et al.  
Group Art Unit 1647  
Examiner Name Unassigned  
Attorney Docket Number PF112P3D1C1



## U.S. PATENT DOCUMENTS

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
M	AA	5,633,147		Meissner et al.	05-27-1999	
	AB	5,283,354		Lemischka	02-01-1994	
	AC	5,240,848		Keck et al.	08-31-1993	
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	AK	5,607,918		Eriksson et al.	03-04-1997	
	AL	5,776,755		Alitalo et al.	07-07-1998	
	AM	08/510133			08/1995	
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	AP	08/671573			06/1996	
	AQ	60/003491			09/1995	
	AR	08/554374			11/1995	

## FOREIGN PATENT DOCUMENTS

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
M	AS		99/46364		Human Genome Sciences, Inc.	09-16-1999	
	AT		98/33917		Ludwig Institute for Cancer Research/Univ. Helsinki Licensing Ltd.	06-08-1998	
	AU		98/07832		Ludwig Institute for Cancer Research/Univ. Helsinki Licensing Ltd. Oy	02-26-1998	

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<i>[Signature]</i>	7-15-03

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	2	of	9	Application Number	09/935,726
				Filing Date	August 24, 2001
				First Named Inventor	HU et al.
				Group Art Unit	1647
				Examiner Name	Unassigned
				Attorney Docket Number	PF112P3D1C1

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		Office <sup>1</sup>	Number <sup>2</sup> Kind Code <sup>3</sup> (if known)			
M	AV		96/39515	Human Genome Sciences, Inc.	12-12-1996	
	AW		96/05856	Human Genome Sciences, Inc.	02-29-1996	
	AX		95/24414	Human Genome Sciences, Inc.	09-14-1995	
	AY		95/19985	Human Genome Sciences, Inc.	07-27-1995	
	AZ		92/14748	American Cyanamid Co.	09-03-1992	
	BA		9-403464	Human Genome Sciences, Inc.	01-31-1996	
	BB		99/21590	Merck & Co.	05-06-1999	
	BC		99/08522	Ludwig Institute for Cancer Research/Univ. Helsinki Licensing Ltd.	02-25-1999	
	BD		98/56936	Max-Planck-Gesellschaft Zur Forderung Der Wissenschaften E.V.	12-17-1998	
	BE		98/49300	Collateral Therapeutics	11-05-1998	
	BF		98/39035	The Wistar Institute of Anatomy & Biology	09-11-1998	
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	BH		98/06844	Human Genome Sciences, Inc.	02-19-1998	
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	BJ		0-476983	Bayne et al.	03-25-1992	
	BK		0-506477	Bayne et al.	09-30-1992	
	BL		97/05250	University of Helsinki	02-13-1997	
	BM		97/09427	Genentech, Inc.	03-13-1997	
	BN		97/17442	Immunex Corporation	05-15-1997	

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Sheet 3 of 9

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Application Number	09/935,726
Filing Date	August 24, 2001
First Named Inventor	HU et al.
Group Art Unit	1647
Examiner Name	Unassigned
Attorney Docket Number	PF112P3D1C1

## OTHER REFERENCES - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	2
M	BQ	ACHEN <i>et al.</i> , "Vascular endothelial growth factor D (VEGF-D) is a ligand for the tyrosine kinases VEGF receptor-2 (Flk1) and VEGF receptor 3 (Flt4)," <i>Proc. Natl. Acad. Sci. (USA)</i> , 95(2): 548-553 (1998).	
	BP	ALDERSON, <i>et al.</i> (1999) Vascular endothelial cell growth factor (VEGF)-2 enhances the development of rat photoreceptor cells in vitro. <i>Keystone Symposia, Ocular Cell and Molecular Biology</i> , 202. (Abstract provided)	
	BQ	ANDERSSON <i>et al.</i> , "Assignment of interchain disulfide bonds in platelet-derived growth factor (PDGF) and evidence for agonist activity of monomeric PDGF," <i>J. Biol. Chem.</i> , 267(16): 11260-11266 (1992).	
	BR	ANDERSSON W.F., "Human gene therapy," <i>Science</i> , 256:808-813 (1992).	
	BS	Aprelikova <i>et al.</i> , "FLT4, a novel class III receptor tyrosine kinase in chromosome 5q33-qter," <i>Cancer Research</i> , 52:746-748 (1992).	
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	BU	FERRARA <i>et al.</i> , "Molecular and biological properties of the vascular endothelial growth factor family of proteins," <i>Endocrine Rev.</i> 13(1): 18-32 (1992).	
	BV	FINNERTY <i>et al.</i> , "Molecular cloning of murine FLT and FLT4," <i>Oncogene</i> 8(11): 2293-2298 (1993).	
	BW	HELDIN <i>et al.</i> , "Structure of platelet-derived growth factor: implications for functional properties," <i>Growth Factors</i> 8:245-252 (1993).	
	BX	EICHMANN <i>et al.</i> , "Avian VEGF-C: cloning, embryonic expression pattern and stimulation of the differentiation of VEGFR2-expressing endothelial cell precursors," <i>Development</i> 125(4): 743-752 (1998).	
	BY	PAJUSOLA <i>et al.</i> , "FLT4 receptor tyrosine kinase contains seven immunoglobulin-like loops and is expressed in multiple human tissues and cell lines," <i>Cancer Research</i> 52:5738-5743 (1992).	
	BZ	LEUNG <i>et al.</i> , "Vascular endothelial growth factor is a secreted angiogenic mitogen," <i>Science</i> 246:1306-1309 (1989).	
	CA	BREIER <i>et al.</i> , "Expression of vascular endothelial growth factor during embryonic angiogenesis and endothelial cell differentiation," <i>Development</i> 114:521-532 (1992).	
	CB	BELL <i>et al.</i> , "Human epidermal growth factor precursor: cDNA sequence, expression in vitro and gene organization," <i>Nucl. Acids Res.</i> 14(21): 8427-8446 (1986).	
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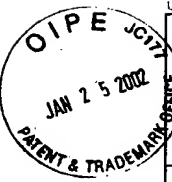
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known

Application Number	09/935,726
Filing Date	August 24, 2001
First Named Inventor	HU et al.
Group Art Unit	1647
Examiner Name	Unassigned
Attorney Docket Number	PF112P3D1C1

Sheet	4	of	9
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## OTHER REFERENCES - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
BC	CD	BETSHOLTZ <i>et al.</i> , "cDNA sequence and chromosomal localization of human platelet-derived growth factor A-chain and its expression in tumor cell lines," <i>Nature</i> 320:695-699 (1986).	
	CE	CLAFFEY <i>et al.</i> , "Vascular endothelial growth factor," <i>J. Biol. Chem.</i> 267(23): 16317-16322 (1992).	
	CF	CORSON <i>et al.</i> , "Fibrillin binds calcium and is coded by cDNAs that reveal a multidomain structure and alternatively spliced exons at the 5' end," <i>Genomics</i> 17:476-484 (1993).	
	CG	FERRARA <i>et al.</i> , "The vascular endothelial growth factor family of polypeptides," <i>J. Cellular Biochemistry</i> 47:211-218 (1991).	
	CH	GEORGE <i>et al.</i> , "Current Methods in Sequence Comparison and Analysis," <i>Macromolecular Seq. and Syn. Selected Meth - Application</i> (Alan R. Liss), pp. 127-149 (1988).	
	CI	HU <i>et al.</i> , "A novel regulatory function of proteolytically cleaved VEGF-2 for vascular endothelial smooth muscle cells," <i>FASEB J.</i> 11:498-504 (1997).	
	CJ	JOUKOV <i>et al.</i> , "A novel vascular endothelial growth factor, VEGF-C, is a ligand for the Flt4 (VEGFR-3) and KDR (VEGFR-2) receptor tyrosine kinases," <i>EMBO J.</i> 15(2): 290-298 (1996).	
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	CM	KECK <i>et al.</i> , "Vascular permeability factor, an endothelial cell mitogen related to PDGF," <i>Science</i> 246: 1309 (1989).	
	CN	KINGSLEY, D., "The TGF- $\beta$ superfamily: new members, new receptors, and new genetic tests of function in different organisms," <i>Genes &amp; Development</i> 8: 133-146 (1994).	
	CO	KUKK <i>et al.</i> , "VEGF-C receptor binding and pattern of expression with VEGFR-3 suggests a role in lymphatic vascular development," <i>Development</i> 122: 3829-37 (1996).	
	CP	LEE <i>et al.</i> , "Vascular endothelial growth factor-related protein: a ligand and specific activator of the tyrosine kinase receptor Flt4," <i>Proc. Natl. Acad. Sci. (USA)</i> , 93:1988-1992 (1996).	
	CQ	MAGLIONE <i>et al.</i> , "Two alternative mRNAs coding for the angiogenic factor, placenta growth factor (PIGF), are transcribed from a single gene of chromosome 14," <i>Oncogene</i> 8:925-931 (1993).	

Examiner Signature	<i>Laurel</i>	Date Considered	9-15-03
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet **5** of **9** Complete if Known

Application Number 09/935,726  
Filing Date August 24, 2001  
First Named Inventor HU et al.  
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## OTHER REFERENCES - NON PATENT LITERATURE DOCUMENTS

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CR		MAGLIONE <i>et al.</i> , "Isolation of a human placenta cDNA coding for a protein related to the vascular permeability factor," <i>Proc. Natl. Acad. Sci. (USA)</i> , 88:9267-9271 (1991).	
CS		MASSAGUE, J., "The transforming growth factor-beta family," <i>Annu. Rev. Cell Biol.</i> 6:597-641 (1990).	
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CU		MILLAUER <i>et al.</i> , "High affinity VEGF binding and developmental expression suggest FLK-1 as a major regulator of vasculogenesis and angiogenesis," <i>Cell</i> 72:835-846 (1993).	
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CW		OLTVAI <i>et al.</i> , "Bcl-2 heterodimerizes <i>in vivo</i> with a conserved homolog, bax, that accelerates programmed cell death," <i>Cell</i> 74:609-619 (1993).	
CX		PAULSSON <i>et al.</i> , "The balbani ring 3 gene in <i>chironomus tentans</i> has a diverged repetitive structure split by many introns," <i>J. Mol. Biol.</i> 211:331-349 (1990).	
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DA		TANAKA <i>et al.</i> , "DNA sequence encoding the amino-terminal region of the human c-src protein: implications of sequence divergence among src-type kinase oncogenes," <i>Mol. Cell Biol.</i> 7(5): 1978-1983 (1987).	
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DD		TSUJIMOTO <i>et al.</i> , "Analysis of the structure, transcripts, and protein products of bcl-2, the gene involved in human follicular lymphoma," <i>Proc. Natl. Acad. Sci. (USA)</i> , 83:5214-5218 (1986).	
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DF		FRIEDMAN, T., "A brief history of gene therapy," <i>Nat. Genetics</i> 2:93-98 (1992).	

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Sheet 6 of 9

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M	DG	WILLIAMS, R.S. "Southwestern internal medicine conference: prospects for gene therapy of ischemic heart disease," <i>Am. J. Med. Sci.</i> 306(2): 129-136 (1993).	
	DH	HOCKEL et al., "Therapeutic angiogenesis," <i>Arch. Surg.</i> 128:423-429 (1993).	
	DI	GUZMAN et al., "Efficient gene transfer into myocardium by direct injection of adenovirus vectors," <i>Circ. Res.</i> 73:1202-1207 (1993).	
	DJ	BELLOMO et al., "Mice Lacking the Vascular Endothelial Growth Factor-B Gene (Vegfb) Have Smaller Hearts, Dysfunctional Coronary Vasculature, and Impaired Recovery From Cardiac Ischemia," <i>Circ. Research</i> 89(2): e29-e35 (2000).	
	DK	COCKERILL et al., "Angiogenesis: Models and Modulators" <i>Intl. Rev. Cytology</i> 159:113-160 (1995).	
	DL	GAMBLE et al., "Regulation of In Vitro Capillary Tube Formation by Anti-Integrin Antibodies," <i>J. Cell. Bio.</i> 121(4): 931-943 (1993).	
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	DN	GRIMMOND et al., "Cloning and Characterization of a Novel Human Gene Related to Vascular Endothelial Growth Factor," <i>Genome Research</i> 6:124-131 (1996).	
	DO	HYDE et al., "Correction of the ion transport defect in cystic fibrosis transgenic mice by gene therapy," <i>Nature</i> 362: 250-255 (1993).	
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M	DS	SHIBUYA et al., "Nucleotide sequence and expression of a novel human receptor-type tyrosine kinase gene ( <i>flt</i> ) closely related to the <i>fms</i> family," <i>Oncogene</i> 519-524 (1990).	
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	DX	YOUREY, et al. (2000) Vascular Endothelial Cell Growth Factors Promote the In Vitro Development of Rat Photoreceptor Cells. <i>J. Neuroscience</i> , 20: 6781 - 6788.	

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 7 of 9 Application Number 09/935,726  
Filing Date August 24, 2001  
First Named Inventor HU et al.  
Group Art Unit 1647  
Examiner Name Unassigned  
Attorney Docket Number PF112P3D1C1

## OTHER REFERENCES - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
DK	DY	YOUREY, et al. (1999) Vascular Endothelial Cell Growth Factor (VEGF)-2 Enhances the Development of Rat Photoreceptor Cells In Vitro. Soc. Cell Biology, 227. (Abstract provided)	
	DZ	GenBank Accession No. X68203, APRELIKOVA et al., "H.sapiens mRNA for FLT4, class III receptor tyrosine kinase," November 30, 1993.	
	EA	GenBank Accession No. M95200, CLAFFEY et al., "Mouse vascular endothelial growth factor mRNA, complete cds," April 27, 1993.	
	EB	GenBank Accession No. M24160, DIGNAM et al., "C.tentans 185-kd secretory protein (sp185) mRNA, partial cds, clone pCt185," April 26, 1993.	
	EC	GenBank Accession No. M24276, DIGNAM et al., "C.tentans 140-kd secretory protein (sp140) mRNA, partial cds, clone pCt140.1," April 26, 1993.	
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	EE	GenBank Accession No. D88689, FINNERTY et al., "Mus musculus mRNA for flt-1, complete cds," April 14, 2000.	
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	EI	GenBank Accession No. X59397, MATTHEWS et al., "Mouse Flk-1 mRNA for a tyrosine kinase receptor," November 6, 1991.	
	EJ	GenBank Accession No. X52263, PAULSSON et al., "C.tentans balbiani ring 3 (BR3) gene," December 18, 1992.	
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	EL	GenBank Accession No. M63972, TISCHER et al., "Human vascular endothelial growth factor gene, exon 2," August 3, 1993.	
	EM	GenBank Accession No. M63973, TISCHER et al., "Human vascular endothelial growth factor gene, exon 3," August 3, 1993.	
	EN	GenBank Accession No. M63974, TISCHER et al., "Human vascular endothelial growth factor gene, exon 4," August 3, 1993.	
	EO	GenBank Accession No. M63975, TISCHER et al., "Human vascular endothelial growth factor gene, exon 5," August 3, 1993.	

Examiner Signature *David L* Date Considered 9/15/02

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 8 of 9

## Complete if Known

Application Number	09/935,726
Filing Date	August 24, 2001
First Named Inventor	HU et al.
Group Art Unit	1647
Examiner Name	Unassigned
Attorney Docket Number	PF112P3D1C1

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## OTHER REFERENCES - NON PATENT LITERATURE DOCUMENTS

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M	EP	GenBank Accession No. M63976, TISCHER <i>et al.</i> , "Human vascular endothelial growth factor gene, exon 6," August 3, 1993.	
	EQ	GenBank Accession No. M63977, TISCHER <i>et al.</i> , "Human vascular endothelial growth factor gene, exon 7," August 3, 1993.	
	ER	GenBank Accession No. M63978, TISCHER <i>et al.</i> , "Human vascular endothelial growth factor gene, exon 8," August 3, 1993.	
	ES	GenBank Accession No. M27281, KECK <i>et al.</i> , "Human vascular permeability factor mRNA, complete cds," August 3, 1993.	
	ET	GenBank Accession No. X04571, BELL <i>et al.</i> , "Human mRNA for kidney epidermal growth factor (EGF) precursor," March 21, 1995.	
	EU	GenBank Accession No. X63556, CORSON <i>et al.</i> , "H. sapiens mRNA for fibrillin," February 17, 1997.	
	EV	GenBank Accession No. L19896, CORSON <i>et al.</i> , "Human fibrillin (FBN1) gene, 5' end including alternative exons A, B, and C, and exon M," November 8, 1994.	
	EW	GenBank Accession No. L04947, TERMAN <i>et al.</i> , "Homo sapiens (clones BT3.081.8, BT3.129.5 and BT4.169)," January 6, 1995.	
	EX	GenBank Accession No. M16237, TANAKA <i>et al.</i> , "Human c-src-1 proto-oncogene, exon 2," January 13, 1995.	
	FY	GenBank Accession No. M16243, TANAKA <i>et al.</i> , "Human c-src-1 proto-oncogene, exon 3," January 13, 1995.	
	EZ	GenBank Accession No. M16244, TANAKA <i>et al.</i> , "Human c-src-1 proto-oncogene, exon 4, January 13, 1995.	
	FA	GenBank Accession No. M16245, TANAKA <i>et al.</i> , "Human c-src-1 proto-oncogene, exon 5," January 13, 1995.	
	FB	GenBank Accession No. K03212, ANDERSON <i>et al.</i> , "Human c-src-1 proto-oncogene, exon 6," January 13, 1995.	
	FC	GenBank Accession No. K03213, ANDERSON <i>et al.</i> , "Human c-src-1 proto-oncogene, exon 7," January 13, 1995.	
	FD	GenBank Accession No. K03214, ANDERSON <i>et al.</i> , "Human c-src-1 proto-oncogene, exon 8," January 13, 1995.	
	FE	GenBank Accession No. K03215, ANDERSON <i>et al.</i> , "Human c-src-1 proto-oncogene, exon 9," January 13, 1995.	
	FF	GenBank Accession No. K03216, TANAKA <i>et al.</i> , "Human c-src-1 proto-oncogene, exon 10, January 13, 1995.	
C	FG	GenBank Accession No. K03217, TANAKA <i>et al.</i> , "Human c-src-1 proto-oncogene, exon 11," January 13, 1995.	

Examiner Signature	<i>Davis</i>	Date Considered	7/15/03
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Sheet 9 of 9

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Application Number	09/935,726
Filing Date	August 24, 2001
First Named Inventor	HU et al.
Group Art Unit	1647
Examiner Name	Unassigned
Attorney Docket Number	PF112P3D1C1

## OTHER REFERENCES - NON PATENT LITERATURE DOCUMENTS

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M	FH	GenBank Accession No. K03218, TANAKA <i>et al.</i> , "Human c-src-1 proto-oncogene, exon 12," January 13, 1995.	
	FI	GenBank Accession No. M13994, TSUJIMOTO <i>et al.</i> , "Human B-cell leukemia/lymphoma 2 (bcl-2) proto-oncogene mRNA encoding bcl-2-alpha protein, complete cds," October 31, 1994.	
	FJ	GenBank Accession No. M13995, TSUJIMOTO <i>et al.</i> , "Human B-cell leukemia/lymphoma 2 (bcl-2) proto-oncogene mRNA encoding bcl-3-beta protein, complete cds," October 31, 1994.	
	FK	GenBank Accession No. L22473, OLTVAI <i>et al.</i> , "Human Bax alpha mRNA, complete cds," December 15, 1993.	
	FL	GenBank Accession No. L22474, OLTVAI <i>et al.</i> , "Human Bax beta mRNA, complete cds," December 13, 1993.	
	FM	GenBank Accession No. AJ000185, ACHEN <i>et al.</i> , "Homo Sapiens mRNA for vascular endothelial growth factor-D," February 11, 1998.	
	FN	International Search Report, Application No. PCT/US99/05021.	
	FO	International Search Report, Application No. PCT/US99/05291.	

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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	09/935,726
Sheet	1	of	1	Filing Date	August 24, 2001
				First Named Inventor	Hu, et al.
				Group Art Unit	1647
				Examiner Name	<del>Unassigned</del> <i>Landman</i>
				Attorney Docket Number	PF112P3D1C1

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>2</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>3</sup> (if known)			

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
<i>M</i>	FP	EP	0476983	AI	Merck & Co., Inc.	03-25-1992		

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	EQ	International Search Report, Application No. PCT/US01/24658 mailed on Dec. 12, 2001.						

Examiner Signature	<i>Landman</i>	Date Considered	9-15-02
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